INEEL Intelligence

Volume 3, Issue 7 ! July 30, 2003

A high-level monthly briefing on operations and activities at the U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory – Home of Science and Engineering Solutions. Work at the lab supports the Department's business lines of environmental quality, energy resources, national security and science.

■ ENERGY RESOURCES – Nuclear/Hydrogen Energy Expert Named Deputy Manager

The U.S. Department of Energy this month named John Kotek the new Deputy Manager for the department's Idaho Operations Office (NE-Idaho). "John's experience and familiarity with DOE's nuclear programs, with Argonne National Laboratory, and in particular, his experience at the Idaho site, makes him ideally suited for the Deputy Manager position at Idaho," said William D. Magwood, IV, director, DOE's Office of Nuclear Energy, Science and Technology. Kotek has more than 14 years of engineering experience in nuclear reactor development and management of federal research programs, both as a prior federal employee and since 1999, as a senior manager within Argonne National Laboratory. He was the American Nuclear Society's Glenn T. Seaborg Congressional Fellow in 2002, serving as an energy advisor to Sen. Jeff Bingaman, ranking member of the Senate Energy and Natural Resources Committee.

■ ENVIRONMENTAL QUALITY – Technology to Clean Engine Exhausts Unveiled

Few people have ever characterized a two-cycle engine as clean-burning. But that may change if an idea developed by three researchers at the Department of Energy's INEEL makes it to market. The invention is a small separator that removes unburned oil and gas from a two-cycle engine's exhaust without compromising engine performance. The separator takes the exhaust stream and spins it at a high rate, thereby centrifugally separating the heavier oil, fuel and particulates from the lighter gaseous combustion byproducts. The heavy constituents are then burned in an afterburner, or captured and removed for recycling or disposal in an environmentally acceptable manner. The separator may also reduce noise. Installing the separator inside the existing muffler or exhaust system would be equivalent to adding increased baffling.

■ NATIONAL SECURITY – Idaho Technology Heralded as Among World's Best

The Change Detection System, a technology developed by researchers with the INEEL's National Security Division, has been singled out to receive a 2003 R&D 100 award. The citation means the system is considered by R&D Magazine's panel of judges to be one of the world's most significant technological developments of the year. The Change Detection System automatically aligns and compares digital images ranging from photos of cyber locks and cargo containers to medical scans. The system-enabled comparison reveals subtle changes too slight to be detected by conventional analysis.

■ SCIENCE – INEEL Scientist Receives National Recognition

The American Nuclear Society this summer honored an INEEL scientist for his efforts to educate the public about nuclear power. Eric Loewen received the ANS' Public Communications award at the society's annual meeting in San Diego. Loewen has explained nuclear science in easy-to-understand terms to audiences ranging from kindergartners to United Nations' councils. He says he prefers speaking in simple, straightforward English to more technical jargon because it allows him to use his sense of humor. Loewen adds that he never turns down a request to speak with students. The ANS presents this award to one of its 11,000 members each year.

For more information, contact Brad Bugger at 208-526-0833